

CHAPTER – EIGHT

SCREEN LAYOUTS

8.1 Overview

This section includes the screenshots of the final project.

8.2 Layouts from EDA.ipynb

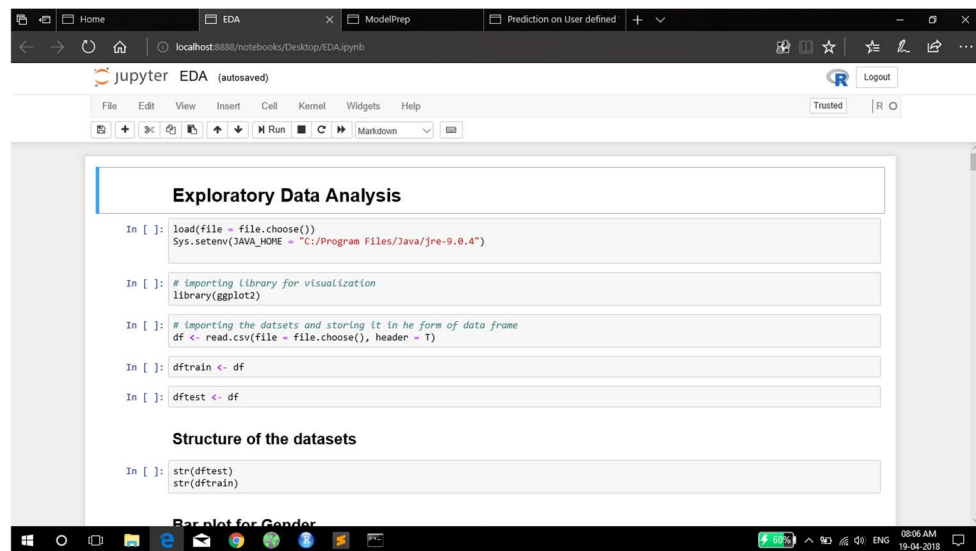


Fig 8.1 Screenshot of EDA

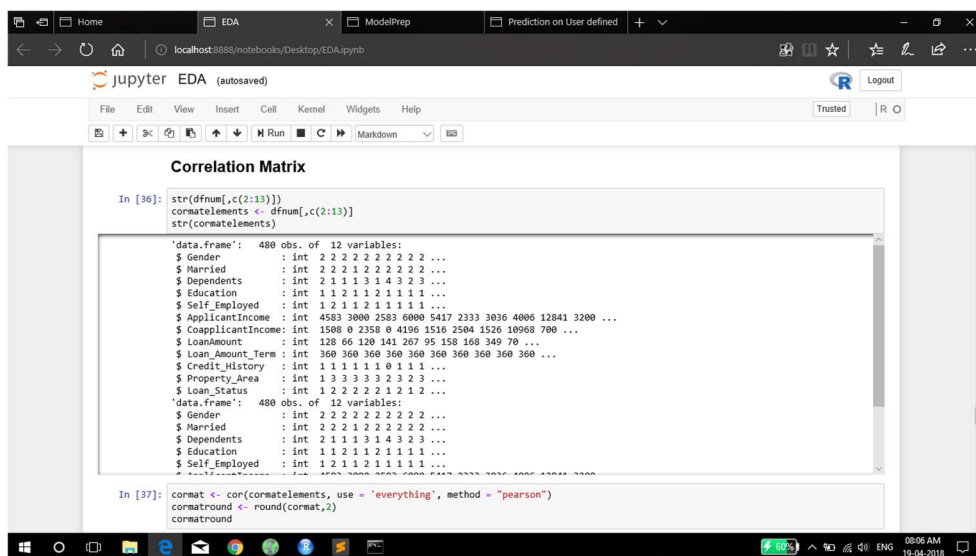


Fig 8.2 Screenshot of EDA

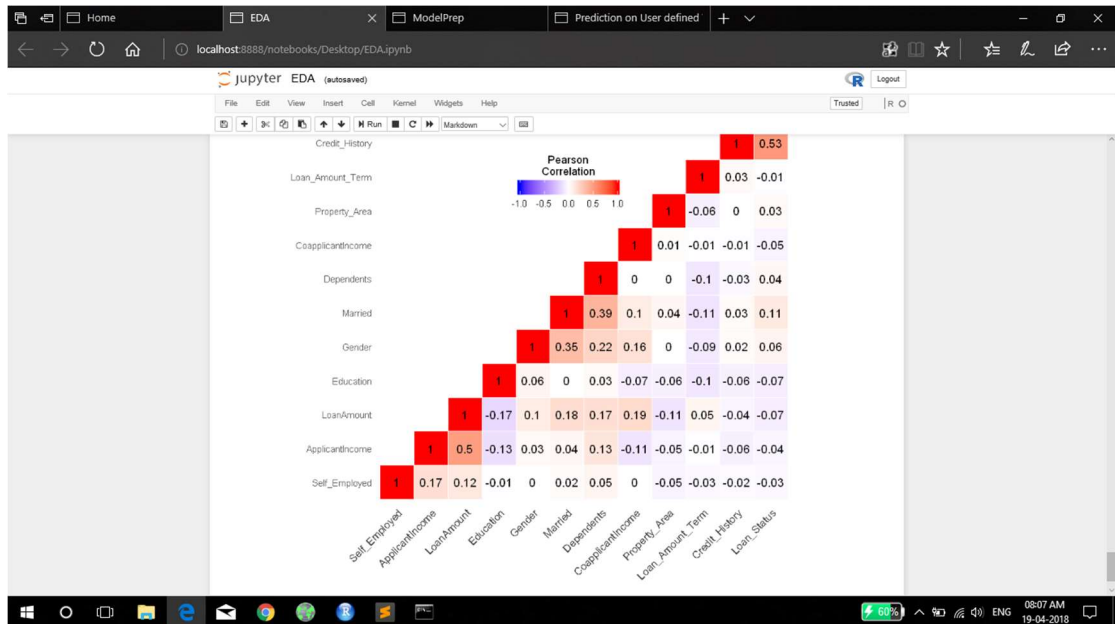


Fig 8.3 Screenshot of EDA

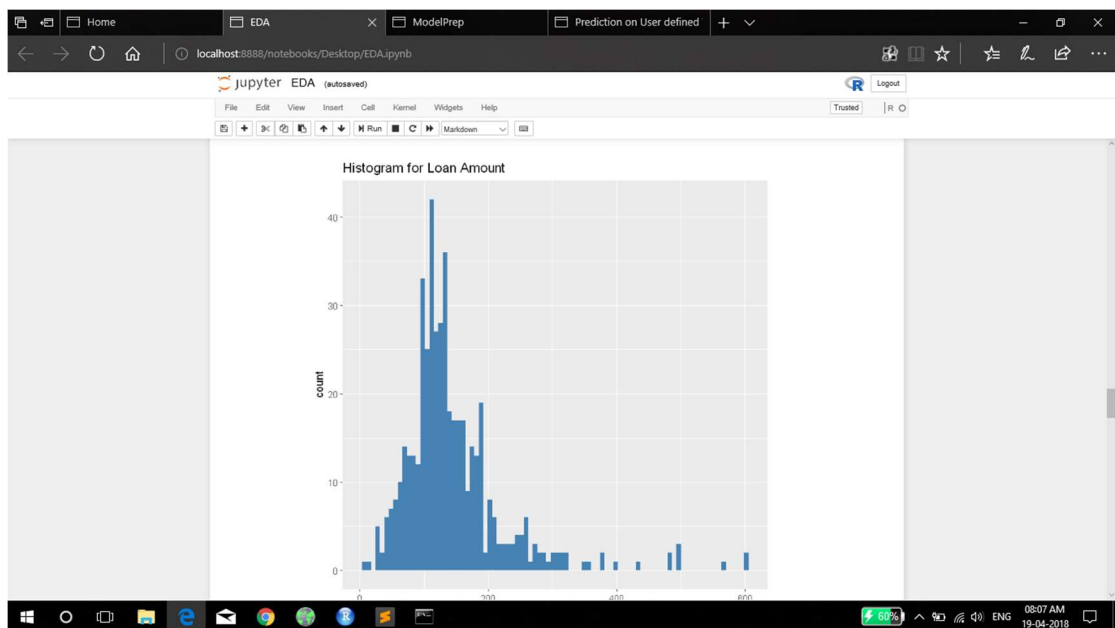
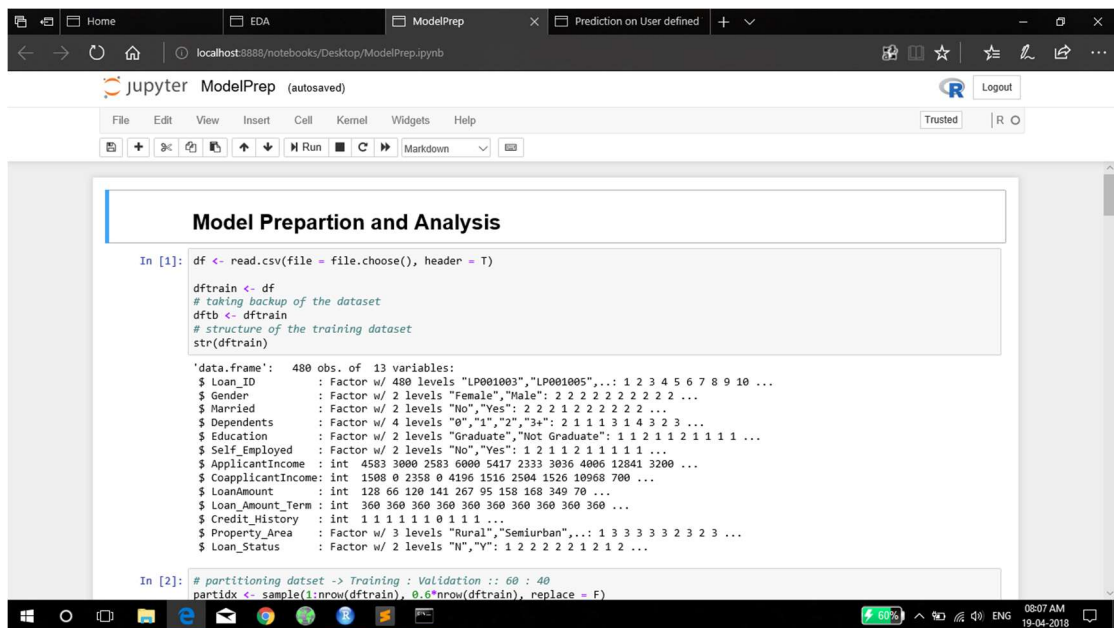


Fig 8.4 Screenshot of EDA

8.3 Layouts from Model Preparation and Analysis.ipynb



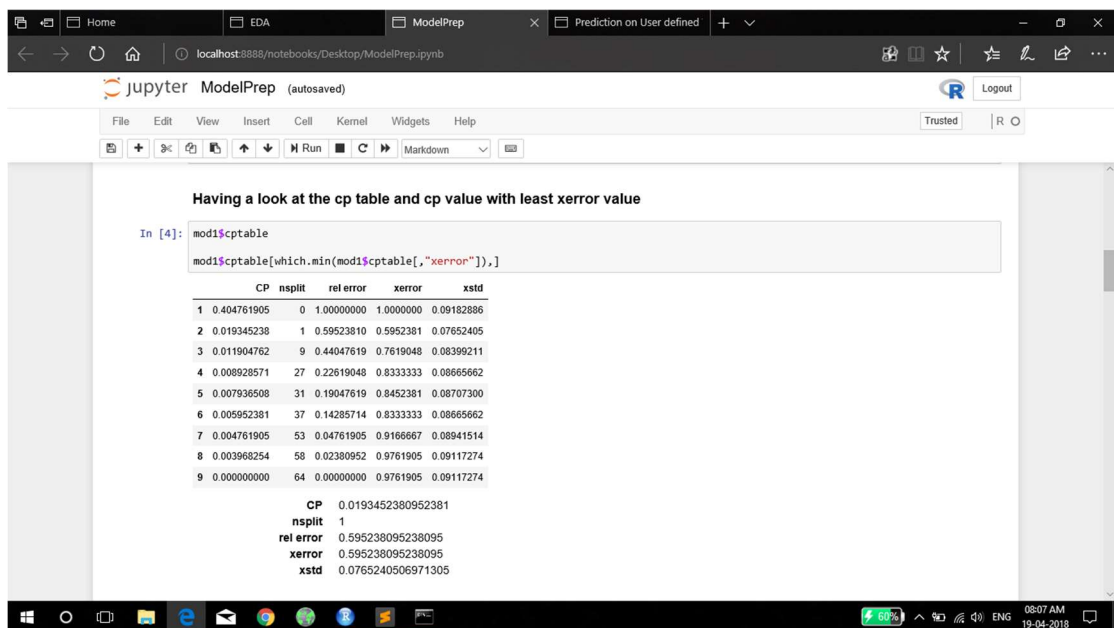
```
In [1]: df <- read.csv(file = file.choose(), header = T)

dftrain <- df
# taking backup of the dataset
dftb <- dftrain
# structure of the training dataset
str(dftrain)

'data.frame': 480 obs. of 13 variables:
 $ Loan_ID      : Factor w/ 480 levels "LP001003","LP001005",...: 1 2 3 4 5 6 7 8 9 10 ...
 $ Gender       : Factor w/ 2 levels "Female","Male": 2 2 2 2 2 2 2 2 2 2 ...
 $ Married      : Factor w/ 2 levels "No","Yes": 2 2 1 2 2 2 2 2 2 ...
 $ Dependents   : Factor w/ 4 levels "0","1","2","3+": 2 1 1 1 3 1 4 3 2 3 ...
 $ Education    : Factor w/ 2 levels "Graduate","Not Graduate": 1 1 2 1 1 2 1 1 1 1 ...
 $ Self_Employed : Factor w/ 2 levels "No","Yes": 1 2 1 1 2 1 1 1 1 1 ...
 $ ApplicantIncome : int  4583 3000 2583 6000 5417 2333 3036 4006 12041 3200 ...
 $ CoapplicantIncome: int  1508 0 2358 0 4196 1516 2594 1526 10968 700 ...
 $ LoanAmount    : int  128 66 120 141 267 95 158 168 349 70 ...
 $ Loan_Amount_Term : int  360 360 360 360 360 360 360 360 360 ...
 $ Credit_History  : int  1 1 1 1 1 0 1 1 1 ...
 $ Property_Area   : Factor w/ 3 levels "Rural","Semiurban",...: 1 3 3 3 3 3 2 3 2 3 ...
 $ Loan_Status     : Factor w/ 2 levels "N","Y": 1 2 2 2 2 1 2 1 2 ...

In [2]: # partitioning dataset -> Training : Validation :: 60 : 40
partidx <- sample(1:nrow(dftrain), 0.6*nrow(dftrain), replace = F)
```

Fig 8.5 Screenshot of Model Prep



```
In [4]: mod1$cpstbl
mod1$cpstbl[which.min(mod1$cpstbl[, "xerror"]),]

  CP  nsplit  rel error  xerror  xstd
1  0.404761905  0  1.00000000  1.0000000  0.09182886
2  0.019345238  1  0.59523810  0.5952381  0.07652405
3  0.011904762  9  0.44047619  0.7619048  0.08399211
4  0.008928571  27  0.22619048  0.8333333  0.08665662
5  0.007936508  31  0.19047619  0.8452381  0.08707300
6  0.005952381  37  0.14285714  0.8333333  0.08665662
7  0.004761905  53  0.04761905  0.9166667  0.08941514
8  0.003968254  58  0.02380952  0.9761905  0.09117274
9  0.000000000  64  0.00000000  0.9761905  0.09117274

  CP  nsplit  rel error  xerror  xstd
1  0.0193452380952381
2  0.595238095238095
3  0.595238095238095
4  0.0765240506971305
```

Fig 8.6 Screenshot of Model Prep

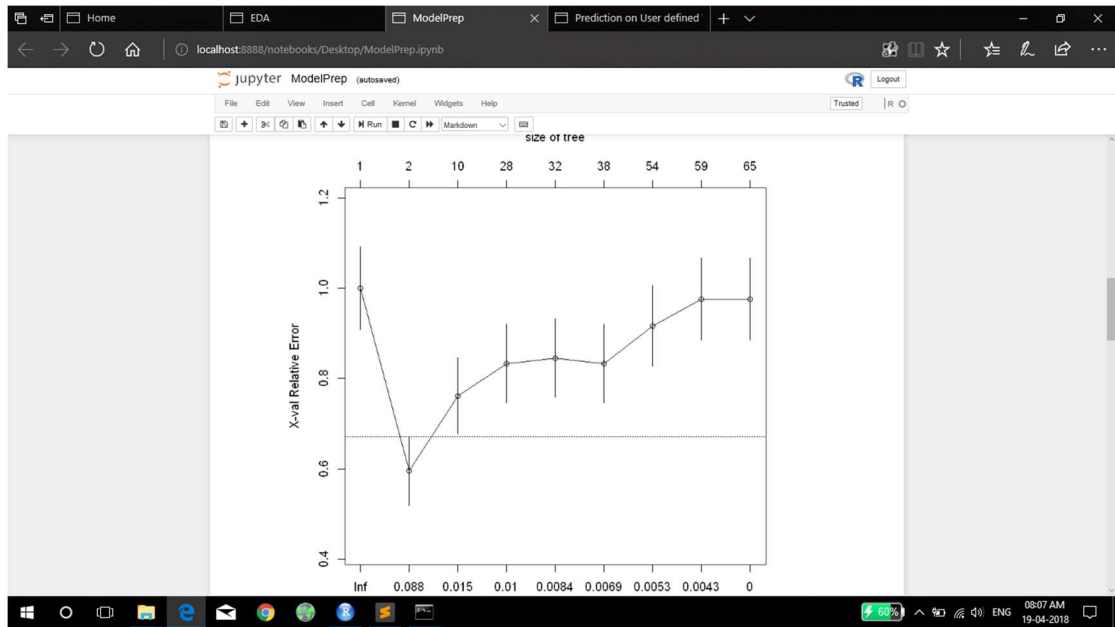


Fig 8.7 Screenshot of Model Prep

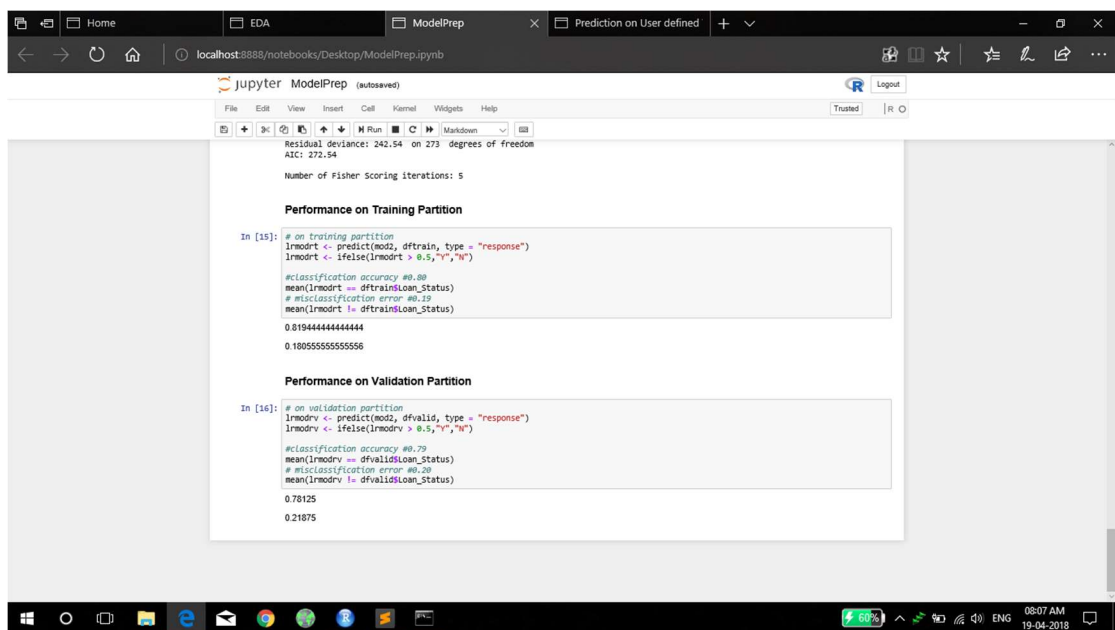


Fig 8.8 Screenshot of Model Prep

8.4 Layouts from Prediction on User Defined Values.ipynb

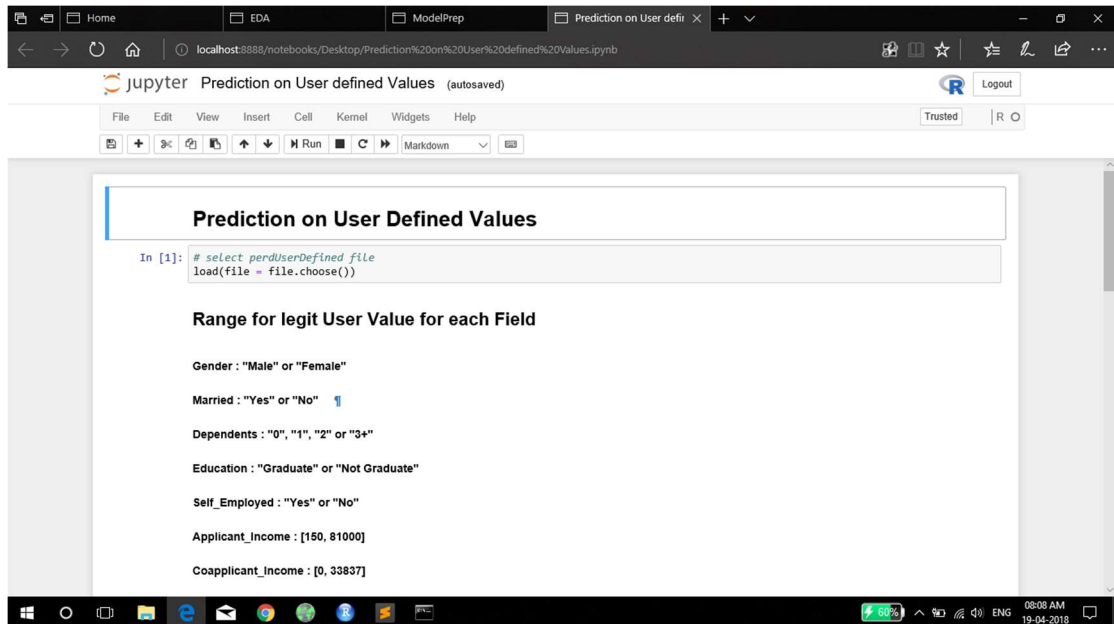


Fig 8.9 Screenshot of User Defined Values Predictions

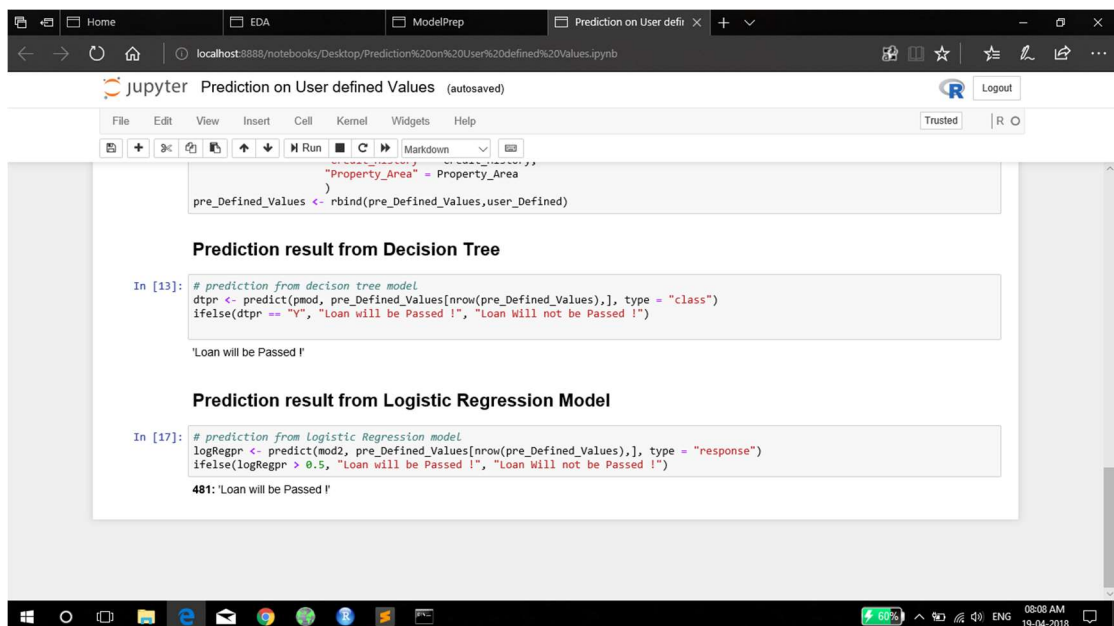


Fig 8.10 Screenshot of User Defined Values Predictions